

Table SI. Patient information in each group.

Groups for sample collection	Number of individuals	Age		Sex		Total PMBC samples	Total plasma samples
		Minimum	Maximum	Male	Female		
Healthy children for plasma	22	1 Y	12 Y	12	10	-	22
Patients with leukemia for plasma	43	10 M	13 Y	24	19		
Patients with leukemia for plasma and PBMCs	12	1 Y	13 Y	8	4	18	55
Patients with leukemia for PBMCs	6	2 Y	8 Y	2	4		
Healthy children for PBMCs	6	1 Y	7 Y	3	3	6	-

Y, year; M, month; PMBC, peripheral blood mononuclear cell.

Table SII. Clinical information of patients with pediatric leukemia.

Patient number	Sex	Age	Flow cytometry analysis	White blood cell number/immature cell proportion in peripheral blood (%)	Fusion gene or chromosome	Leukemia type	Sample collection
32	Male	3 Y	B-cell acute lymphoblastic leukemia	32.39x10 ⁹ /35	No fusion gene	B-ALL	PBMCs
35	Female	7 Y	B-cell acute lymphoblastic leukemia	22.32x10 ⁹ /61	No fusion gene	B-ALL	PBMCs
37	Female	8 Y	Acute myeloid leukemia	2.33x10 ⁹ /No data	No fusion gene	AML	PBMCs
38	Male	2 Y	B-cell acute lymphoblastic leukemia	22.16x10 ⁹ /No data	BCR/ABL1 fusion gene	B-ALL	PBMCs
39	Female	7 Y	Abnormal immature B lymphocytes	4.85x10 ⁹ /18	No fusion gene	B-ALL	PBMCs
41	Female	5 Y	T-cell acute lymphoblastic leukemia	165.95x10 ⁹ /28	No fusion gene	T-ALL	PBMCs
2	Female	13 Y	91.4% immature B lymphocytes	39.18x10 ⁹ /56	No fusion gene	B-ALL	PBMCs and plasma
3	Male	5 Y	B-cell acute lymphoblastic leukemia	43.62x10 ⁹ /73	BCR/ABL1(p190) fusion gene	B-ALL	PBMCs and plasma
9	Male	2 Y	B-cell acute lymphoblastic leukemia (Pro-B-ALL)	47.16x10 ⁹ /66	No fusion gene	B-ALL	PBMCs and plasma
11	Female	6 Y	B-cell acute lymphoblastic leukemia	11.28x10 ⁹ /18	BCR/ABL fusion gene	B-ALL	PBMCs and plasma
12	Female	1 Y	Immature B lymphocytes	2.23x10 ⁹ /2	ETV/RUNX1 fusion gene	B-ALL	PBMCs and plasma
15	Male	3 Y	Acute myeloid leukemia	217.62x10 ⁹ /23	No fusion gene	AML	PBMCs and plasma
18	Male	13 Y	Acute monocyte leukemia (M5b)	24.73x10 ⁹ /20	MLL-AF9 gene	AML	PBMCs and plasma
20	Male	8 Y	Immature B lymphocytes	391.93x10 ⁹ /3	46,XY[5]	B-ALL	PBMCs and plasma
21	Female	8 Y	T-cell acute lymphoblastic leukemia	478.00x10 ⁹ /28	AMLL/ETO fusion gene	T-ALL	PBMCs and plasma
22	Male	3 Y	Acute myeloid leukemia (Non-M3)	4.78x10 ⁹ /12	No fusion gene; 46,XY(15)	AML	PBMCs and plasma
27	Male	2 Y	Acute myeloid leukemia (Non-M3)	118.42x10 ⁹ /84	No fusion gene	AML	PBMCs and plasma
31	Male	2 Y	Acute myeloid leukemia (Non-M3)	179.41x10 ⁹ /90	MLL/ENL fusion gene	AML	PBMCs and plasma
1	Female	5 Y	Acute myeloid leukemia (Non-M3)	47.81x10 ⁹ /54	No fusion gene	AML	PBMCs and plasma
4	Female	13 Y	Acute myeloid leukemia (Non-M3)	2.64x10 ⁹ /No data	No fusion gene	AML	Plasma
13	Male	4 Y	Acute myeloid leukemia (Non-M3)	12.16x10 ⁹ /14	MLL-AF9 fusion gene	AML	Plasma
19	Male	11 Y	Acute myeloid leukemia (M2)	6.78x10 ⁹ /No data	AMLL/ETO fusion gene	AML	Plasma
26	Female	10 Y	Myeloid primitive cells	26.18x10 ⁹ /5	CBFβ-MYH11 fusion gene	AML	Plasma
42	Male	11 Y	Myeloid primitive cells	62.10x10 ⁹ /43	AML1-ETO fusion gene	AML	Plasma
43	Male	7 Y	Acute myeloid leukemia	61.40x10 ⁹ /72	WT1 fusion gene	AML	Plasma
44	Female	3 Y	Myeloid primitive cells	14.75x10 ⁹ /45	MLL-AF9 fusion gene	AML	Plasma
45	Male	4 Y	Acute myeloid leukemia (Non-M3)	82.50x10 ⁹ /51	AML1-ETO fusion gene	AML	Plasma
46	Female	9 Y	Acute myeloid leukemia	21.74x10 ⁹ /6	CBF/MYH11 fusion gene	AML	Plasma
47	Female	9 Y	Myeloid primitive cells	39.56x10 ⁹ /59	CATA2 fusion gene	AML	Plasma
24	Male	1 Y	Acute myeloid leukemia (Non-M3)	6.23x10 ⁹ /18	No fusion gene	AML	Plasma
5	Male	5 Y	~81.2% of T-ALL tumor cells	279.39x10 ⁹ /82	No fusion gene	AML	Plasma
28	Male	12 Y	Immature monocytes	46.37x10 ⁹ /48	No fusion gene	T-ALL	Plasma
33	Male	1 Y	Immature monocytes	0.90x10 ⁹ /No data	No fusion gene	AML	Plasma
					ETV6/RUNX1 (TEL/AMLL) fusion gene; 47,XY+21[17]/46,XY[1]		

Table SII. Continued.

Patient number	Sex	Age	Flow cytometry analysis	White blood cell number/immature cell proportion in peripheral blood (%)	Fusion gene or chromosome	Leukemia type	Sample collection
6	Male	3 Y	82.7% immature B lymphocytes	41.81x10 ⁹ /64	No fusion gene	B-ALL	Plasma
8	Female	4 Y	21.0% abnormal and immature B lymphocytes	1.46x10 ⁹ /No data	No fusion gene	B-ALL	Plasma
7	Male	4 Y	Abnormal B lymphocytes	28.10x10 ⁹ /25	No fusion gene	B-ALL	Plasma
10	Female	2 Y	B-cell acute lymphoblastic leukemia	2.74x10 ⁹ /No data	Chromosome karyotype 46,XY(9)	B-ALL	Plasma
14	Male	2 Y	Abnormal B lymphocytes	38.09x10 ⁹ /75	No fusion gene	B-ALL	Plasma
16	Male	4 Y	Immature B lymphocytes	110.92x10 ⁹ /80	TCF3/PBX1 fusion gene; chromosome karyotype, 46,XY,t(1,19)(q23; p13)	B-ALL	Plasma
17	Male	2 Y	Abnormal B lymphocytes	42.52x10 ⁹ /60	E2A-PBX1 gene	B-ALL	Plasma
23	Male	7 Y	Immature B lymphocytes	11.40x10 ⁹ /36	45,X,-Y,t(8;21)(q22;q22)	B-ALL	Plasma
25	Male	12 Y	B-cell acute lymphoblastic leukemia	9.82x10 ⁹ /No data	No fusion gene	B-ALL	Plasma
29	Female	5 Y	Immature B lymphocytes	4.68x10 ⁹ /No data	ETV6/RUNX1 fusion gene	B-ALL	Plasma
30	Female	10 M	Immature B lymphocytes	36.64x10 ⁹ /66	ETV6/RUNX1 fusion gene	B-ALL	Plasma
34	Female	6 Y	B-cell acute lymphoblastic leukemia (Pro-B-ALL)	69.80x10 ⁹ /16.7	MLL-AF4 fusion gene	B-ALL	Plasma
36	Female	4 Y	Abnormal immature B lymphocytes	167.59x10 ⁹ /No data	ETV6/RUNX1 fusion gene	B-ALL	Plasma
40	Female	3 Y	B-cell acute lymphoblastic leukemia	11.76x10 ⁹ /38	No fusion gene	B-ALL	Plasma
48	Male	11 Y	B-cell acute lymphoblastic leukemia	93.25x10 ⁹ /41	CRFL2 fusion gene	B-ALL	Plasma
49	Male	11 Y	B-cell acute lymphoblastic leukemia	126.70x10 ⁹ /92	FLT3-TKD fusion gene	B-ALL	Plasma
50	Male	4 Y	B-cell acute lymphoblastic leukemia	5.75x10 ⁹ /15	E2A-PBX1 fusion gene	B-ALL	Plasma
51	Female	6 Y	~54% abnormal and immature B lymphocytes	21.73x10 ⁹ /39	TCF3/PBX1 fusion gene	B-ALL	Plasma
52	Male	11 Y	B-cell acute lymphoblastic leukemia	15.00x10 ⁹ /21	ZNKF384/TCF3 fusion gene	B-ALL	Plasma
53	Female	4 Y	Immature B lymphocytes	8.54x10 ⁹ /17	KMT2A-USP2 fusion gene	B-ALL	Plasma
54	Male	3 Y	~77.4% abnormal and immature B lymphocytes	54.21x10 ⁹ /62	MLL fusion gene	B-ALL	Plasma
55	Female	14 Y	Immature B lymphocytes	6.10x10 ⁹ /9	MEF2D/BCL9 fusion gene	B-ALL	Plasma
56	Male	2 Y	B-cell acute lymphoblastic leukemia	161.00x10 ⁹ /87	EP300-ZNF384 fusion gene	B-ALL	Plasma
57	Male	5 Y	B-cell acute lymphoblastic leukemia	4.20x10 ⁹ /5	No fusion gene	B-ALL	Plasma
58	Female	3 Y	Immature B lymphocytes	75.10x10 ⁹ /85	46,XY[2]	B-ALL	Plasma
59	Male	3 Y	Abnormal immature B lymphocytes	60.20x10 ⁹ /25	No fusion gene	B-ALL	Plasma
60	Female	5 Y	~55.1% abnormal and immature B lymphocytes	15.31x10 ⁹ /48	CRKF fusion gene	B-ALL	Plasma
61	Female	3 Y	Immature B lymphocytes	6.32x10 ⁹ /12	No fusion gene	B-ALL	Plasma

Y, year; M, month; B-ALL, B-cell acute lymphoblastic leukemia; T-ALL, T-cell acute lymphoblastic leukemia; AML, acute myeloid leukemia; PBM, peripheral blood mononuclear cell.